1. **Cost Benefit Analysis**:

The following article provides an example how such a cost/benefit analysis is considered.

Schneier, Bruce. Security at What Cost? National ID System Is Not Worth The $23 Billion Price Tag. [*http://www.schneier.com/essay-207.html*](http://www.schneier.com/essay-207.html).

The following article uses some typical accounting measurements for economics of information security.

Gordon, L. A., & Richardson, R. (2004). The New Economics of Information Security. *Optimize*. April 2004. p83-867 (Trident library)

The following article recaps what we talked about perceptions of security. More importantly, it discusses how people generally do not perceive gains and costs equally. When you conduct a cost/benefit analysis of security, you should keep that in mind.

West, Ryan (2008). The Psychology of Security. **Communications of the ACM**, Apr2008, Vol. 51 Issue 4. pp34-40.

1. **Incentive Design**:

The economics of information security is not only about cost/benefit analysis of implementing a security measure. Another major topic in economics is mechanism design, which provides principles and methods (like game theory) to help design incentive-compatible mechanisms that ensure participants are better off behaving honestly than dishonestly. See the following article to get a peek:

The Economist. (2007) Intelligent Design. Oct 18th, 2007. [*http://www.economist.com/finance/displaystory.cfm?story\_id=9988840*](http://www.economist.com/finance/displaystory.cfm?story_id=9988840)

To know more about the three Nobel Prize winners in 2007 economics division, surf [*http://nobelprize.org/nobel\_prizes/economics/laureates/2007/*](http://nobelprize.org/nobel_prizes/economics/laureates/2007/) and check them out.

It is not easy to understand the revelation principle or the incentive-compatible design. I introduce you the concepts here for the purpose of making you aware of such a method. It takes time to learn how to design a game (a mechanism) that every party is better off by being honest.

Well, on a lighter note. Interestingly, a movie called "Mad Money" tells a story of three female employees of the Federal Reserve Bank stealing money that is about to be shredded. It is not a movie that I recommend to watch a second time, but it is entertaining enough to watch once. The movie is also a fit for the educational purpose here. I suggest you watch it once when you get a chance during this term, and pay special attention to the human factors -- especially the incentives of the thieves and the Chief Security Officer.

1. **Other Economics Issues as to Security**:

As a matter of fact, there are many aspects in applying economics to information security. The following article has mentioned a list of authors that research economics of information security and provided a brief overview of their research:

Anderson R. and Schneier B., (2005) [*Economics of Information Security*](http://www.schneier.com/paper-economics.pdf), IEEE Security and Privacy 3 (1), 2005, pp. 12-13. (Retrieved May 19, 2008).

To know more in depth, you can choose to view the video (optional):

Simonyi Konferencia 2011 - Economics of Information Security and Privacy. Retrieved from [*http://www.youtube.com/watch?v=fSfH80DY6S4*](https://www.youtube.com/watch?v=fSfH80DY6S4)

You are probably overwhelmed now with all these economics. I hope you also have broadened your views on security and have said "wow" to yourself that now you hold a much broader view on security and how to approach it from economic perspective.